LONG-TERM IMPACT OF MINDING OUR BUSINESS ENTREPRENEURSHIP PROGRAMS FOR LOW-INCOME MIDDLE SCHOOL STUDENTS

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ABSTRACT

No scholarly research has been conducted on the long-term effects of entrepreneurship programs on low-income middle school students. To begin to address this gap, the present study evaluates the long-term impact of entrepreneurship focused service learning and summer programs, Minding Our Business (MOB), on program alumni 7 to 15 years after completing their entrepreneurship programs. The results of the 1997-2005 alumni survey indicate that MOB has a positive impact on middle school students in terms of their academic, life, and work skills. MOB seems to have a positive impact on academic and career planning as well. A large number of alumni reported that they became more interested in going to college because of MOB. Respondents also credit MOB programs with having a positive impact with their careers and work lives. One-third of the group reported having started businesses and nearly one-half reported planning to start one. Also, a majority of respondents reported feeling more confident about their own capabilities and more hopeful about their futures.

BACKGROUND

Minding Our Business, Inc. is a non-profit organization, which, prior to its new 501 c 3 designation this year, had operated for more than sixteen years as a community outreach program of Rider University’s College of Business Administration. The program was developed in 1997 out one of the author’s concern for low-income urban youth. The mission of Minding Our Business is to advance the personal and vocational development of Trenton youth through entrepreneurship education and mentoring. Since 1997 MOB has operated two programs, The Service-Learning Program and the Summer Program, today with more than 2,500 Trenton low-income student alumni. This study attempts to determine the long-term impact of both programs on student outcomes.

PROGRAM DESCRIPTION

The MOB Service-Learning Program

Students in this program participate in fourteen 90-minute training sessions from February to May. Three college students mentor a group of seven to twelve middle school
students in team building, leadership, communication and entrepreneurship skills. Mentors guide student teams through the process of starting and running a business.

The MOB Summer Program

The program provides Trenton students with the opportunity to run a business individually during the summer months. Middle school students participate in 14 days of training in entrepreneurship at Rider University. Students learn to run their businesses while improving their math, reading, writing and presentations skills. The training is followed by an experiential component where students participate in business coaching sessions, merchandise trips, and four community market fairs at which they run their businesses.

Short-Term Effects. Research conducted by Hernandez and Newman (2006, 2009) on student outcomes supports the assertion that MOB is an excellent model for mentoring and entrepreneurship education of young urban adolescents. Research indicates that students in MOB become more interested in going to college and in starting their own businesses. Students participating in MOB observe positive changes in self and improvement in important work/life skills: entrepreneurship, leadership, communication, and team skills.

Research on academic records data indicates that MOB Service-Learning participation reduces school absenteeism and tardiness (Hernandez and Newman, 2006). MOB programs also improve self-esteem among participating students. (Hernandez and Newman, 2006 and 2009)

Program Objectives and Specific Outcomes. The study attempts to measure the impact of the MOB programs on its Trenton alumni. The following are the long-term outcomes that will be used to evaluate program effectiveness.

1. Improved Academic Involvement. Students are more likely to stay in school and graduate from high school.
2. Improved Academic Skills for Summer Program (reading and math). Students improve their reading and math skills.
4. Improved Self-Efficacy-Self-Confidence.
5. Increased Interest in Going to College.

EXISTING RESEARCH

Research on the long-term outcome effects of entrepreneurship education programs is lacking. The Network for Teaching Entrepreneurship (NFTE) and Junior Achievement commissioned the few existing alumni impact studies in this area. These are the two largest organizations in the world providing entrepreneurship education to youth.

In 1998 a study conducted for NFTE tracked a random sample of 253 young adults ages 18-28 that had completed the NFTE New York City program as a junior or senior in high school, and compared to a group of young adults who never participated in NFTE. Among the key study findings include: (1) 83% of NFTE alumni want to start their own businesses compared to 57% of the comparison group. (2) 36% of the alumni have started a business of their own versus 9% of the comparison group. (3) 95% of the alumni indicated that NFTE improved their business skills and knowledge (NFTE 1998).
A Brandeis University study conducted for NFTE in 1996 surveyed alumni, most who had participated in their programs in the previous 4 to 16 months. Among the full sample of 430, 75% of the alumni indicated that their communication skills were better after NFTE and 25% reported a great deal of program impact on school performance. Among the post-high-school-aged alumni surveyed, 65% had ever run a business, 78% planned on running a business in the future, and 70% were in post-secondary education (Hahn and Leavitt 1997).

Junior Achievement conducted a study of impact on various student outcomes for alumni after completing middle school and/or high school programs two years previously. Their research indicates that students participating during their middle school and high school years had a better understanding of free enterprise, were more likely to be employed (while high school students) and were more likely to indicate that they would enroll in postsecondary education than were other same-age students (The Education Group 2004).

Both NFTE and Junior Achievement research cannot be considered long-term effect studies since they surveyed alumni between 4 months and 2 years after students participated in their programs. The NFTE impact studies are for the most part limited to alumni of high school programs. In the Hahn and Leavitt (1997) study 71% of the full alumni sample were high school students, 7% were high-school graduates, and only 9% were middle school students. The present study extends the current research by studying long-term outcome effects on program alumni 7 to 15 years after completing their entrepreneurship program. In addition, MOB long-term effects are examined for alumni who participated while they were middle school students.

The study by Newman and Hernandez (2011) evaluated the long-term impact of the MOB Service-Learning program on the personal and vocational development of the Rider University college student mentors participating in the program from 1997 to 2005. Their research suggested that a high quality service-learning experience in entrepreneurship like MOB appeared to have positive long-term effects on young adults’ attitudes, intentions and behaviors involving their learning experience, career selection, career preparation, skill development, and community service involvement. The present study complements the Newman and Hernandez (2011) study by evaluating the impact of MOB programs on the 1997-2005 Trenton student participants who are now alumni of the programs.

METHOD

Focus Group Research

A focus group research session took place on September 15, 2011 and was facilitated by one of the authors with vast experience with this research method. Eleven MOB program alumni participated who had been student participants in the program between 1997 and 2005.

The focus group findings on program impact on alumni were very encouraging. Specifically, the participants were asked about the impact of the program on the following areas: completing high school and attending college; choosing a career; learning academic, life and work skills; and developing a positive self-concept. The participants reported that the MOB programs (both Summer and Service-Learning) positively impacted, either directly or indirectly, all of these areas. In addition, the focus group session resulted in useful suggestions for the construction of the survey questionnaire.
The MOB Alumni Cell Phone Survey

A cell phone survey was used to maximize access to our young respondents (ages 18-30) at their convenience. The most challenging problem faced was the lack of accurate contact information (i.e., current home addresses and phone numbers) for the Trenton students who participated in MOB between 1997 and 2005. The considerable geographic mobility among low-income families is well documented and accounts for the outdated alumni phone and address records (Hahn and Leavitt 1997). The search feature of Facebook, the electronic White Pages, and a people online search service were used to obtain more accurate contact information but with little success. Also, fourads asking for alumni to contact a number for the survey, were placed during the summer of 2011 in a local newspaper. These methods yielded legitimate contacts including contact with a program alumnus or a family member, resulting in 15% (16) of all alumni cell phone surveys conducted.

The door-to-door contact method proved to be most effective in obtaining cell phone numbers of past MOB program participants for the survey. Starting in the fall of 2012 the MOB Director visited all 608 alumni family addresses in the program records. A total 149 addresses were missing in the program records for 1995-2005 out of the population of 757 alumni. The hope was to contact alumni and/or their relatives who still lived in the 1997-2005 addresses. Once contacted, they were asked to provide the necessary cell phone information. A flyer was left at the door when people were not at home asking for the alum to call the MOB Director and provide a cell phone number for the survey. Thirty-nine percent of the homes visited were vacant or represented addresses not belonging to alumni or their relatives; twenty-one percent resulted in legitimate contacts; and, the status of 40% of the addresses could not be ascertained since no response was received from the flyers that were left behind. The 108 interviews conducted represent 14% of the total population of 1997-2005 alumni (N=757). The door-to-door method yielded 85% or 92 of the 108 interviews conducted.

The questionnaire was designed in order to determine the program impact on alumni in the following areas: (1) academic, life, and work skills; (2) self-confidence, self-efficacy and hope as a student; (3) business ownership and plans to run businesses; (4) interest in and attendance at college and plans for future study. A $25 incentive was given to each alumni respondent for completing the phone interview.

PARTICIPANTS

One hundred and eight telephone interviews conducted were completed with individuals who had participated in an MOB program as a Trenton middle school student and serve as the basis of responses for this study. The interviewees ranged from 18 to 30 years of age. Approximately 60% of the interviewees were female (59.3%, 64), a figure consistent with the historic program participation rate by gender, and 89.8% (97) were black. In terms of the highest level of education attained, more than one-quarter (26.9%, 29) of the interviewees had earned an Associate’s or Bachelor’s degree with another 22% (24) reporting either being currently enrolled in college or having completed some college. Forty-two percent (45) of interviewees reported that a high school degree was their highest level of education attainment. Only 2 respondents (1.9%) indicated not having yet completed high school. In terms of current employment status, 52.8% (57) of interviewees reported being employed full-time, 27.8% (30)
reported being employed part-time and 8.3% (9) reported being unemployed and currently seeking employment.

FINDINGS

The first section of the telephone survey verified interviewee participation in the MOB program and asked for comment on the most memorable experience from program participation. Three-fourths (82) of interviewees reported participating in the service learning, after school, program while reported participation in the summer program was slightly less at 62% (67). Interviewees participated in each of the programs, summer and service learning, an average of 2 years.

As was noted above, some of the key objectives of the MOB program are to positively impact middle school students in terms of the development of their academic, life and work skills. Using a four-point scale, interviewees evaluated the extent that MOB contributed to skill development in each of these areas. As reported in Table 1 below, at least two-thirds of respondents credit MOB with “a lot of impact” to their development of life and work skills. While significantly fewer interviewees reported a similar level of contribution to their academic skills of reading comprehension and math, the results do indicate contribution of the MOB program to these academic skills at least at the “some” level or higher by 87% (94) of interviewees for math skills and by 82% (89) of interviewees for reading comprehension skills. Less than 8% (8) of interviewees reported no impact of the MOB program on their development of these various skill areas.

Table 1: MOB Contribution to the Development of Academic, Life & Work Skills

Scale: A lot, Some, Very Little, Not at All

<table>
<thead>
<tr>
<th>AREA/SKILL</th>
<th>A LOT OF IMPACT</th>
<th>SOME IMPACT</th>
</tr>
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<tbody>
<tr>
<td>Communication</td>
<td>75% (81)</td>
<td>23.1% (25)</td>
</tr>
<tr>
<td>Team</td>
<td>73.1% (79)</td>
<td>22.2% (24)</td>
</tr>
<tr>
<td>Entrepreneurship</td>
<td>75.9% (82)</td>
<td>19.4% (21)</td>
</tr>
<tr>
<td>Leadership</td>
<td>72.2% (78)</td>
<td>22.2% (24)</td>
</tr>
<tr>
<td>Reading comprehension</td>
<td>40.7% (44)</td>
<td>41.7% (45)</td>
</tr>
<tr>
<td>Math</td>
<td>50.9% (55)</td>
<td>36.1% (39)</td>
</tr>
</tbody>
</table>
The impact of the MOB programs on academic and career planning was evident in other responses as well. Two-thirds of interviewees (66.7%, 72) reported that MOB had a strong impact on their staying in school with another 22.2% (24) indicating at least some impact in this area. Nearly all interviewees indicated that MOB helped them become better students (89.8%, 97) and approximately two-thirds (65.7%, 71) reported that MOB had “a lot” of impact on their becoming more interested in college.

Besides having a favorable impact on academics, MOB programs also were reported by respondents to have had a positive impact on their careers. Not only did MOB have a favorable impact on the career plans of 70.4% (76) of interviewees, but it also was credited by 92.6% (100) of respondents as helping “some” or “a lot” in their preparation for the world of work. 87% (94) of interviewees affirmed that they have used something learned from MOB in their life or work. As discussed above, the MOB program is committed to providing entrepreneurship education. Nearly one-third (32.4%, 35) of the interviewees reported having started a business since participating in the program and nearly one-half (47.2%, 51) of those who have not yet started a business plan to do so in the future.

In addition to program objectives related to skill development, MOB also endeavors to positively impact the lives of participants in terms of improving their self-esteem, self-confidence, self-efficacy and level of hope. As indicated in Table 2, the MOB program has a strong impact on these aspects of participants’ lives and attitudes.

### Table 2: MOB Contribution to Self-Confidence and Hope

<table>
<thead>
<tr>
<th>Feelings About Self</th>
<th>A LOT OF IMPACT</th>
<th>SOME IMPACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Felt better about self</td>
<td>67.6% (73)</td>
<td>22.2% (24)</td>
</tr>
<tr>
<td>Felt more confident</td>
<td>66.7% (72)</td>
<td>22.2% (24)</td>
</tr>
<tr>
<td>Felt more capable</td>
<td>60.2% (65)</td>
<td>29.6% (32)</td>
</tr>
<tr>
<td>Felt more hopeful about one’s future</td>
<td>64.8% (70)</td>
<td>21.3% (23)</td>
</tr>
</tbody>
</table>

Finally, interviewees were asked to comment on their current interest in the MOB program as alumni. Nearly all of the interviewees (95.4%, 103) reported that they would be interested in staying in touch with the MOB program. Interest in specific means of staying in contact with the program is detailed in Table 3. The most popular ways of staying connected were: receiving current information about the program, attending an alumni reunion, serving as a judge at the business plan presentations and becoming a mentor.
Table 3: Interest in Various Means of Staying in Touch with the MOB Program

<table>
<thead>
<tr>
<th>Activity</th>
<th>% (n) Expressing Interest</th>
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<tbody>
<tr>
<td>Receive information about the program</td>
<td>86.1% (93)</td>
</tr>
<tr>
<td>Attend an alumni reunion</td>
<td>85.2% (92)</td>
</tr>
<tr>
<td>Serve as a judge for the business plan presentations</td>
<td>76.9% (83)</td>
</tr>
<tr>
<td>Become a mentor</td>
<td>73.1% (79)</td>
</tr>
<tr>
<td>Provide financial support</td>
<td>56.5% (61)</td>
</tr>
<tr>
<td>Be a guest speaker</td>
<td>47.2% (51)</td>
</tr>
<tr>
<td>Become a tutor</td>
<td>42.6% (46)</td>
</tr>
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LIMITATIONS AND FUTURE RESEARCH

One of the limitations of this study was the difficulty in obtaining accurate contact information for the alumni of the MOB program, which could lead to sampling bias. Specifically, it is much less likely that alumni who moved away from the greater Trenton area were included. Another limitation is the potential for nonresponse error given the use of telephone number screening devices and an increased skepticism of calls from unfamiliar numbers, both of which can lead to individuals not answering calls and, thereby, not participating in telephone surveys. (Tourangeau 2004, Tuckel and O’Neill 2002) Efforts were made to minimize nonresponse bias by leaving voice mail messages that provided students with both an email address and phone number of the Program Director who is quite familiar to all alumni for the purpose of verifying the validity of the survey. Finally, there is the potential for coverage error arising from alumni who do not own a cell phone.

An important research design limitation of this study is that it only covers program effects on 1997-2005 alumni. In 2007 research on best practices for summer learning was incorporated in the Summer Program design. The program was transformed into a more academically intensive one. Using the entrepreneurship theme, reading and math were effectively integrated into the student learning. As a result of this transformation, the National Summer Learning Association recognized MOB in 2008 and in 2009 as a program finalist in the Excellence in Summer Learning Award competition. In 2009 the program was the National Winner of the Best of Best Practices Award in Entrepreneurship Education at the Small Business Institute National Conference in Florida. It is likely that the level of impact on academic skills, math and reading comprehension, would be higher for Summer Program alumni after 2007 as compared to the 1997-2005 period. Future research on MOB alumni will address this hypothesis.
CONCLUSIONS

Overall, the results of the 1997-2005 alumni survey indicate that MOB has a positive impact on middle school students in terms of their academic, life, and work skills. MOB seems to have a positive impact on academic and career planning as well. A large number of students reported that they have become more interested in going to college because of MOB. Almost half of all alumni (49%) report that they are enrolled in college or completed some college. The reported high school drop-out rate of this group is only 2% comparing very favorably with the 2011 drop-out rate for Trenton’s public high schools of 52.3% (NJ.com 2012). Furthermore, respondents also credit MOB programs with having a positive impact with their careers and work lives. One-third of the group reported having started businesses and nearly one-half reported planning to start one. Finally, a majority of respondents reported psychological benefits of program participation. Feeling more confident about their own capabilities and more hopeful about their futures is typical of this group.

This research is the first in the area of entrepreneurship education for youth studying the long-term program effects on alumni outcomes. Past research in the area of program impact on alumni has been limited to short-term or medium-term effects (up to two years after program participation). Many more factors can affect personal development of a young person in a 7-15 year span than in a 4-24 month period. Saying that a program had "a lot of impact" on the personal development of program alumni is much more meaningful in the longer term than a few months after completing a program. It is fairly impressive to think that a relative short intervention like MOB in middle school student lives, 7 to 15 years ago, has such positive personal and vocational impacts on alumni.

ENDNOTES

1 This research was funded by a generous grant from the PSEG Foundation.

REFERENCES


